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FEDERAL COMMUNICATIONS COMMISSION
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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Part 87 of the	)	PR Docket No. 93-199
Commission's Rules To Implement	)	
Technical Requirements Applicable	)	RM-7610
to Instrument Landing System	)	
Receivers Adopted by the International	)	
Civil Aviation Organization	)	

REPLY COMMENTS OF THE NATIONAL ASSOCIATION OF BROADCASTERS

I. INTRODUCTION

The National Association of Broadcasters ("NAB")[1] hereby submits its reply comments in response to parties filing initial comments on the Notice of Proposed Rule Making ("Notice") in the above-captioned proceeding.[2] NAB finds that the record developed in this proceeding provides ample basis for the Commission adopting aviation receiver standards.

The comments filed in this proceeding generally fall into three categories: (1) support, based upon the commenters' prior experiences with aviation receivers and with the "airspace analysis model" ("AAM-1") currently employed by the Federal Aviation Administration; (2) opposition, based on the belief that

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[1] NAB is a nonprofit, incorporated association of radio and television stations and networks which serves and represents the American broadcast industry.

[2] Notice of Proposed Rule Making in PR Docket No. 93-199, 8 FCC Rcd 4763 (1993).

the proposed compliance dates for receiver manufacturers is too burdensome; and (3) opposition on the ground that the proposed standards would impose increased receiver/industry costs.

In these brief comments, NAB will show that the time is right for Commission adoption of the International Civil Aviation Organization ("ICAO") standards, as proposed in the Notice. Thus, we conclude that the opposition to the FCC's proposed rules, based upon arguments of increased general aviation industry costs, is without sufficient foundation. Additionally, however, NAB would support a modest change in one of the effective dates for rule compliance, in order to afford some relief for avionics radio manufacturers. Correspondingly, we again urge a more expedited effective date for other, related compliance.

II. THE ICAO TECHNICAL STANDARDS MUST BE ADOPTED AS A FIRST STEP TOWARD UPDATING THE AIRSPACE ANALYSIS MODEL.

NAB agrees with the commenters who cited prior experience in trying to resolve technical conflicts brought about by FAA examination of the radio interference potential of broadcast communications facilities. These commenters are mainly broadcasters and their consultants who have been unduly delayed and even prevented from moving/installing their transmission facilities and improving their coverage of the public, based upon the current FAA, overly-restrictive AAM-1.

As the Association of Federal Communications Consulting Engineers, Inc. ("AFCCE") clearly stated:

> ... the lack of adequate standards for aeronautical receivers used for communication and navigation purposes ... has led to the adoption of interference prediction criteria by the Federal Aviation Administration based on empirical data garnered from measurements made on largely older design receiver equipment rather than on radios meeting an improved, scientifically-based standard. In some cases, the protection criteria have been based on the worst case receiver performance.[3]

AFCCE states the most recent airspace analysis model is based upon such empirical data.[4]

The comments of National Public Radio ("NPR") echo the spirit of the AFCCE comments and suggest that the FAA's lack of technical standards has imposed "largely unnecessary burdens" on all FM stations.[5] Additionally, NPR notes that FM broadcasters must contend with FAA perceived interference regulations "... some of which NPR believes are overly broad or misdirected."[6]

The law firm of Hardy and Carey also relates its substantial experience in dealing with the FAA's perceived interference problem.[7] Hardy and Carey note that "... even in rural Tennessee, an applicant for a class A FM station construction permit was held up for years and forced to modify

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[3] See Comments of AFCCE in PR Docket No. 93-199, filed September 27, 1993, at 1-2.

[4] Id. at 2.

[5] See Comments of NPR in PR Docket No. 93-199, filed September 27, 1993, at 3.

[6] Id.

[7] See Comments of Hardy and Carey in PR Docket No. 93-199, filed September 24, 1993, at 3.

its proposal in order to satisfy the FAA that the station would not interfere with aircraft communications."[8]

In reality, the FAA has considered only certain of those aircraft radios currently in use or in production as the basis for development of their AAM-1. Why would the FAA not desire to base its AAM-1 on state-of-the-art receiver technology? The comments of Jeffrey Lea, a consulting electronics engineer working for an avionics company, observe that "... the engineering to do this performance upgrade [better receiver interference immunity] is very significant, but the technology is now available to the avionics industry to do this and it should add very little per-unit cost to receivers."[9]

Avionics manufacturers certainly desire to provide the safest and highest quality equipment. Therefore, various avionics components, including receivers, undergo constant engineering in order to improve upon prior designs. This fact is confirmed in LEA's comments.[10] Adoption of the ICAO receiver technical standards for all aircraft will be the first step toward an updated airspace analysis model based upon modern technology receivers.

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[8] Id. at 2.

[9] Comments of Lea Enterprises & Associates ("LEA") in PR Docket No. 93-199, filed September 20, 1993, at 1.

[10] Id. at 4.

III. ADOPTION OF THE ICAO TECHNICAL STANDARDS FOR ALL AIRCRAFT ILS AND VOR RECEIVERS DOES NOT PRESENT A SIGNIFICANT COST BURDEN TO GENERAL AVIATION.

Opposition to the proposed rule making was raised by the Aircraft Owners and Pilots Association ("AOPA").[11] The basis for AOPA's opposition is the presumed high cost of compliance for the general aviation industry. AOPA states, "It is clear the actual cost of adopting this rule will be much too high for the general aviation community to bear."[12] We remind AOPA that a generally accepted practice in all industries is to retire old technology equipment and replace it with new equipment as designs improve.

Equipment that complies with the ICAO standards is certainly improved technology that would naturally find its way into the cockpits of general aviation aircraft. Therefore, the "high costs" of compliance with the potential requirements of this proceeding only relate to money that would be spent -- anyway -- to update aircraft avionics.

The need for updating avionics receivers is very clearly depicted in LEA's comments that

> During the course of my engineering consulting work, the author has had an opportunity to examine in detail the general aviation electronics (avionics) industry and specifically many "state of the art" VHF Omnirange Radio (VOR) and Instrument Landing System (ILS), considered together as "aeronautical NAVigation" (NAV), receiver systems. Incredibly, some of the

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[11] See Comments of AOPA in PR Docket No. 93-199, filed September 28, 1993.

[12] Id. at 4.

> designs still in production today are vintage mid-1970 designs, many of these with outmoded component technology. Some of these designs have parts going, if not already gone, extinct.[13]

NAB observes that the unavoidable "extinction" of parts for aviation receivers, designed 20 years ago, necessarily signals to the general aviation industry that these old receivers must be replaced with new units. Indeed, money will be spent for this replacement process regardless of the regulations proposed in the instant proceeding, lending no credibility to AOPA's argument of a cost "too high" for the general aviation community to bear.

IV. THE COMMISSION SHOULD MODIFY COMPLIANCE DATES.

Avionics manufacturers, while not disagreeing with the intent of the instant proceeding, raise the important issue of compliance dates. Allied Signal Aerospace ("Allied Signal"), Terra Avionics, Honeywell, Inc., and the General Aviation Manufacturers Association ("GAMA") all stated in their respective comments that the compliance date is unrealistic for ILS and VOR receivers to meet ICAO standards.[14] The Notice specifies a date of January 1, 1994, for this phase of ICAO compliance.[15]

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[13] Comments of LEA, supra note 9, at 3.

[14] See Comments of Allied Signal in PR Docket No. 93-199, filed September 27, 1993, at 1-2; Comments of Terra Avionics in PR Docket No. 93-199, filed September 20, 1993, at 1; Comments of Honeywell, Inc. in PR Docket No. 93-199, filed September 23, 1993, at 4-5; Comments of GAMA in PR Docket No. 93-199, filed September 27, 1993, at 2.

[15] Notice, supra note 2, at ¶ 9.

In light of the time needed to produce compliant equipment, NAB agrees that this compliance date could place a significant burden on manufacturers. NAB suggests that the Commission consider changing the compliance date for manufacture of ILS and VOR receivers that meet the ICAO standards to match the ICAO requirement for installation date of January 1, 1995.[16] This action would alleviate the concerns of those avionics manufacturers who commented in this proceeding. On the other hand, NAB urges the Commission to advance, at least modestly, the other compliance dates specified in the Notice.[17]

V. CONCLUSION

NAB applauds the Commission for initiating this proceeding. The ILS and VOR receiver interference issue has been a burden for the broadcast industry for years -- creating, in many instances, insurmountable problems with building new or modified broadcast facilities. Broadcasters should not be forced to build their transmission sites at locations that may not adequately serve the public. Yet, this is exactly what is happening, time and time again, as brought about by the FAA's use of an airspace analysis model based primarily upon empirical data

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[16] Id.

[17] As NAB stated at page 9 of its initial comments (filed September 27, 1993) in this proceeding, we believe that the Commission should consider advancing some of the other compliance dates, such as the January 1, 1998, international and IFR deadline and the January 1, 2005, general compliance deadline. Each should be advanced significantly to expedite resolution of the aviation radio "interference" controversy as a whole.

gathered from ILS and VOR receivers employing 20 year old technology.

NAB again maintains that the present FAA airspace analysis model ultimately must be updated, based upon a set of realistic criteria, derived from state-of-the-art receivers designed -- at the minimum -- to be in compliance with the ICAO standards. Today, we urge the Commission generally to adopt the proposed rules, set forth in the Notice, as a first step in bringing new technology, interference-immune ILS and VOR receivers into the entire aviation industry. As noted above, NAB has recommended some changes in various compliance deadlines.

Compliance with the ICAO standards, by all aircraft flying in the United States, is a simple technical solution to the interference problem. The Commission should not be dissauded from taking on this task; nor should the FCC rely upon the FAA to

assume this role. Development of receiver standards is -- and should be -- the responsibility of the FCC.

Respectfully submitted,

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October 27, 1993

CERTIFICATE OF SERVICE

I, Judith L. Gerber, do hereby certify that a true and correct copy of the foregoing "Reply Comments of the National Association of Broadcasters" in PR Docket No. 93-199 was sent, via first class mail, on this date, October 27, 1993, to the following:

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